

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 10/575,227
Applicant: M. KAWAI et al.
Filed: April 7, 2006
Title: SCANNER APPARATUS
TC/A.U.: 2625
Examiner: Ngon Binh Nguyen
Confirmation No.: 6987
Docket No.: SEI-120

DECLARATION OF MR. TAKESHI CHUJOU UNDER 37 C.F.R. 1.132

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. I am one of the inventors of U.S. Patent No. D514,575 to Sugitani et al. ("D514,575"), which claims the ornamental design of an image reader for a computer.
2. I understand that D514,575 issued from U.S. Application No. 29/189,758, which was filed on September 11, 2003 ("U.S. Filing Date"), and which claims priority of JP 2003-022949, which was filed on August 7, 2003 ("Foreign Priority Date").
3. I understand that claims of the above-identified utility patent application have been rejected by the Examiner based on D514,575.
4. To the extent that the Applicants' invention is described in D514,575, their invention was made prior to the U.S. Filing Date of D514,575, and was thereafter described in D514,575 by me and the other inventors of D514,575.
5. I understand that the Applicants prepared a Patent, Utility Model Application Request Paper ("Request Paper") before the U.S. Filing Date of D514,575. Copies of that Request Paper are attached to this Declaration as follows:

- 5.1. A redacted copy of the Request Paper is attached as Exhibit 1.
- 5.2. A redacted copy of an English-language translation of the Request Paper is attached as Exhibit 2.
6. The Request Paper illustrates and describes features of an image scanner apparatus, including embodiments of a scanner apparatus shown and described in the Request Paper (Exhibit 1) at, for example, Pages 2/5 and 4/5 and elsewhere.
7. As detailed in the following subparagraphs, the Applicants explained their invention to me and the other inventors of D514,575.
 - 7.1. Together with another inventor of D514,575 (Mr. Minoru Sugitani), I attended a meeting ("First Meeting") with the Applicants after they prepared the Request Paper and before the U.S. Filing Date and the Foreign Priority Date of D514,575.
 - 7.2. The First Meeting was held at PFU Limited (the assignee of this application and the assignee of D514,575) in Ishikawa Prefecture of Japan.
 - 7.3. During the First Meeting, Mr. Minoru Sugitani and I learned about the Applicants' invention from the Applicants with reference to their Request Paper.
8. As detailed in the following subparagraphs, the Applicants' invention was later explained to the remaining inventors of D514,575.
 - 8.1. During a meeting ("Second Meeting") after the First Meeting, I and Mr. Minoru Sugitani met with the remaining co-inventors of D514,575 (Mr. Shinichi Ohta and Mr. Shuji Hashimoto) and explained the Applicants' invention to them.
 - 8.2. The "Second Meeting" was held at PFU Limited in Ishikawa Prefecture of Japan.
 - 8.3. During the Second Meeting, Mr. Minoru Sugitani and I explained the Applicants' invention to Mr. Shinichi Ohta and Mr. Shuji Hashimoto with reference to all of the figures of the Request Paper.

9. I and the other inventors of the ornamental design claimed in D514,575 made no inventive contribution to the functional features claimed in this utility patent application.
10. Thus, to the extent that the Applicants' invention is described in D514,575, the relevant subject matter of D514,575 describes the Applicants' work, was derived from the Applicants, and is not an invention "by another."

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name: Takeshi Chujou

Signature: *T. Chujou*

Date: December 6, 2010

Exhibit 1 - Request Paper
Exhibit 2 - Translated Request Paper

1108525

EXHIBITS

EXHIBIT 1

譲渡証書					受付	(担当) 部長	課長・PM
譲受人 株式会社 ピーエフユー殿 下記発明考案について国内外で特許、若しくは実用新案登録を受ける権利の全部を貴社に譲渡したことに相違ありません。 譲渡人 株式会社 ピーエフユー内 (*注1: 氏名は黒ボールペンにて署名) (*注2: 持分は他社と共有の場合のみ記入。社内においては均等割)					吉田	部長 天海	課長 池田
発明考案者氏名(注1)(フリガナ)	朱肉印	社員コード	職制コード	所属部課名(内線番号)	依頼元番号		
筆頭 (カワ マサシ) 川井 政佳	印	386201	765702	第二事業部 第一技術部 (7573 - 2243)	発明日		
2 (カネツ ノボ) 金光 憲雄	印	799500	765700	第二事業部 (7171 - 4630)	開発製番		
3 (アマノ タロウ) 天海 茂雄	印	772437		第二事業部 第一技術部 (7171 - 4640)	開発製品名		
4 ()	印				実施状況		
5 ()	印				契約関係	<input checked="" type="checkbox"/> 1. なし <input type="checkbox"/> 2. 共同開発 <input type="checkbox"/> 3. 受託開発 <input type="checkbox"/> 4. その他 所属先: <input checked="" type="checkbox"/> 1. 単独 <input type="checkbox"/> 2. 共有 <input type="checkbox"/> 3. 社外 出願人: <input checked="" type="checkbox"/> 1. P.F.U. <input type="checkbox"/> 2. 富士通 <input type="checkbox"/> 3. その他 ()	
名称 イメージスキャナ装置				請求項(案)の数: 3	出願期限		
公知例調査 <input type="checkbox"/> 知財Gと実施、 <input type="checkbox"/> 独自に実施(検索履歴を添付)、 <input type="checkbox"/> 未調査							

1. 目的

本発明は、フラットベッド読取部と、ADF (Auto Document Feeder) を有するイメージスキャ装置に関し、

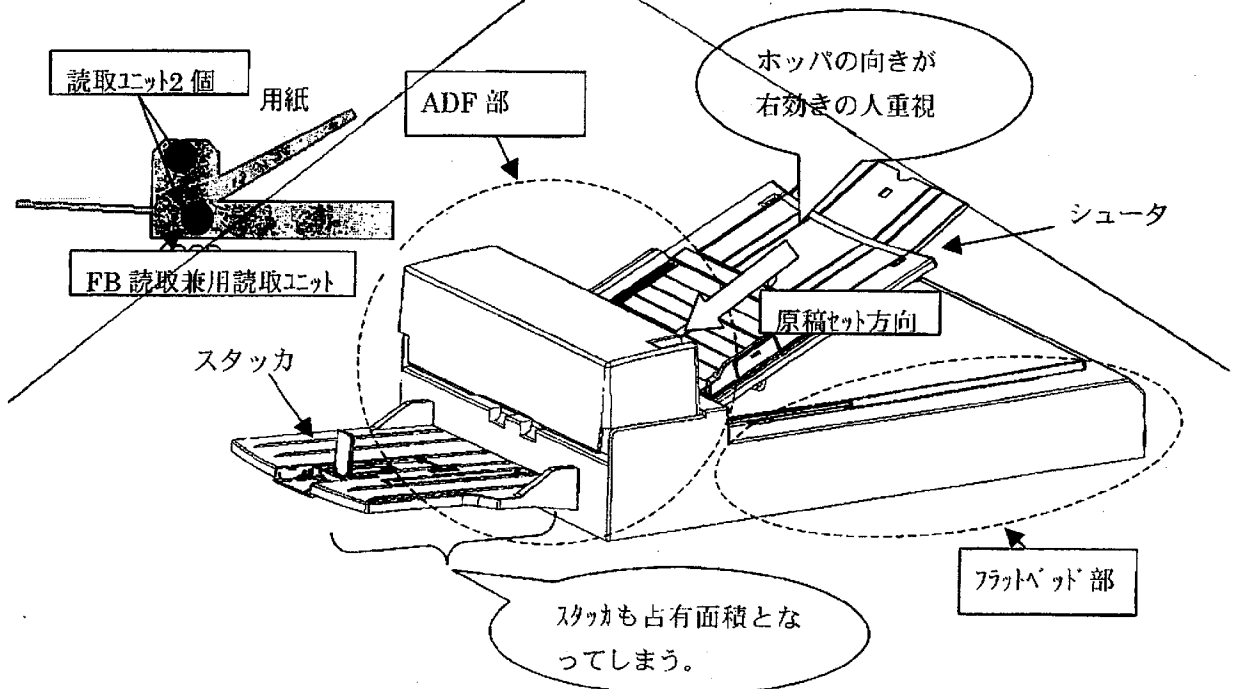
- ① 使用する設置環境に合わせ、装置の操作性を変化させることが可能な装置構造。
 - ② 装置の占有面積を小さくすることができる装置構造。
 - ③ ADFモデル、フラットベッドモデルといった様々なバリエーションモデルを製造側が簡単に設定できること。
- 上記 ①、②、③の達成を目的とする。

2. 構成

【当社の従来技術】

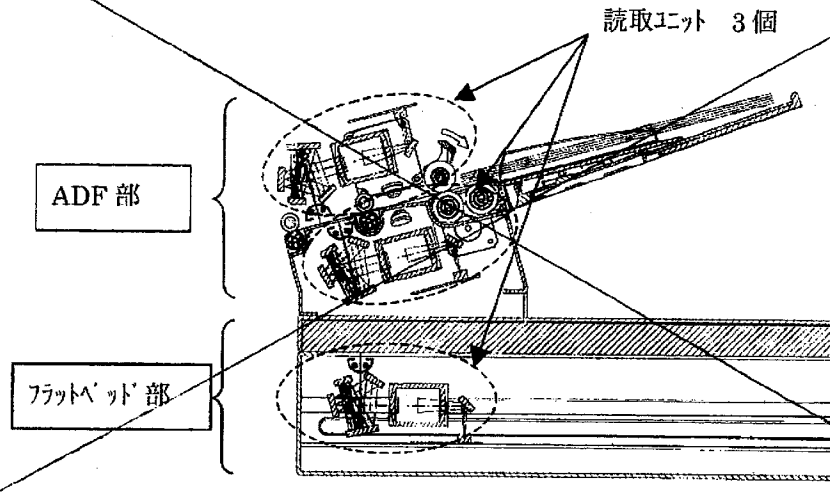
2つの読取ユニットを配備し、ADF使用時の両面読取及びフラットベッド使用時も兼用構造。

ADFは、装置左側に配備されているため、シュタへの原稿セットは、右利きの人は操作しやすいが、左利きの人には難しさがあった。また、装置の占有面積は、スタッカの長さも入ってしまう構造であった。

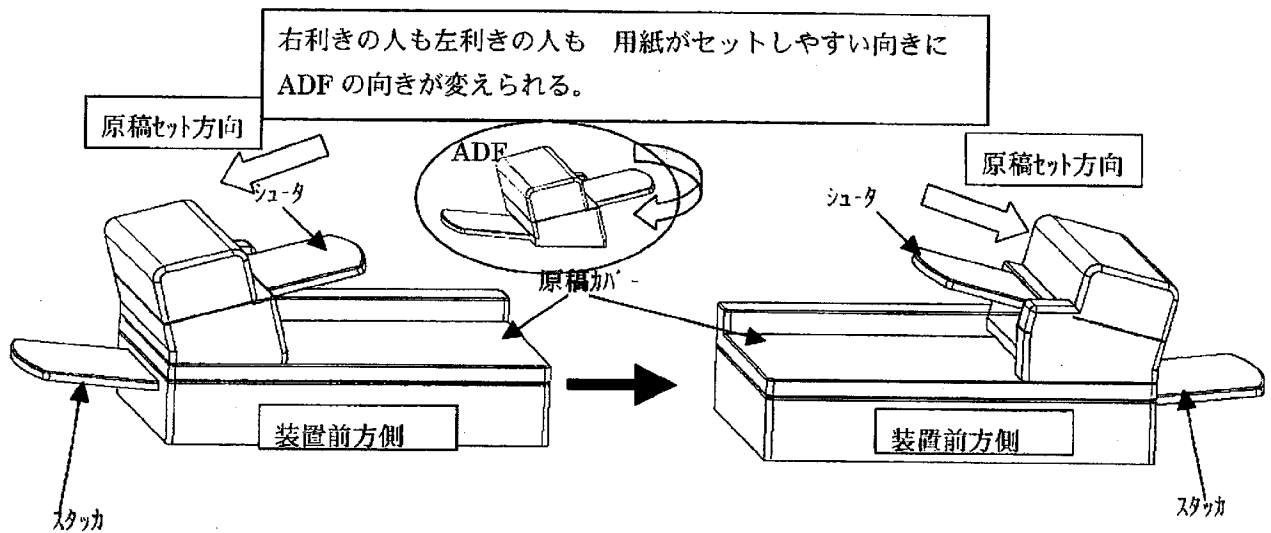


【本発明】

装置に、ADF部の読取ユニット2個 フラットベッド部の読取ユニット1個 計3個の読取ユニットを実装し、ADFユニットのみでも読取が行える構造とし、ADFユニットが装置原稿カバー上の任意の位置に配備でき、かつADFの向きを回転可能とする構造。

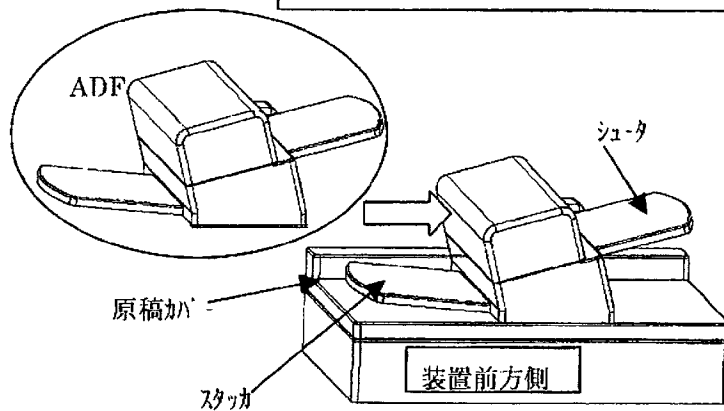


<<本発明の図 その1(目的①の部分)>>



<<本発明の図 その2 (目的②の部分)>>

ADF を移動して原稿が - の中央に置けば シュタ/スタッカ込みで、最小の占有面積の形態。



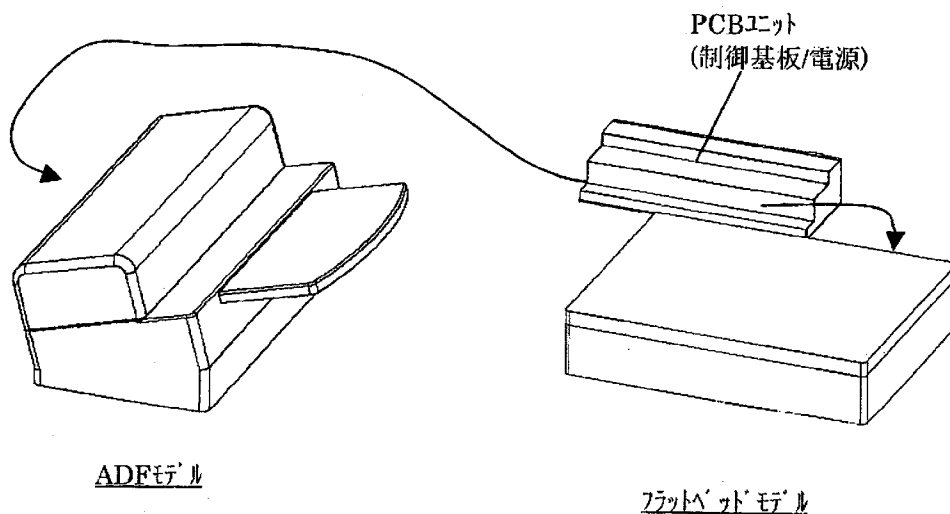
原稿が - を開いたイメージ図

<<本発明の図 その3 (目的③の部分)>>

本発明の装置構造によって、(3つの読取ユニットと ADF が自由に取り外しもできる形態であること。) ADF 部とフラットベッド部が独立して取り付けとしての機能である、読取が行えるため、ADF モデル/フラットベッドモデル/ADF+フラットベッドモデル といった 3 種のモデルを製造側が新規に開発を行わずとも、簡単に準備することができる。

下図の絵は、ADF モデルとフラットベッドモデルを示した図であり、1 例として PCB ユニットをどちら側に搭載するかで 2 モデルが簡単にできる図を示した。

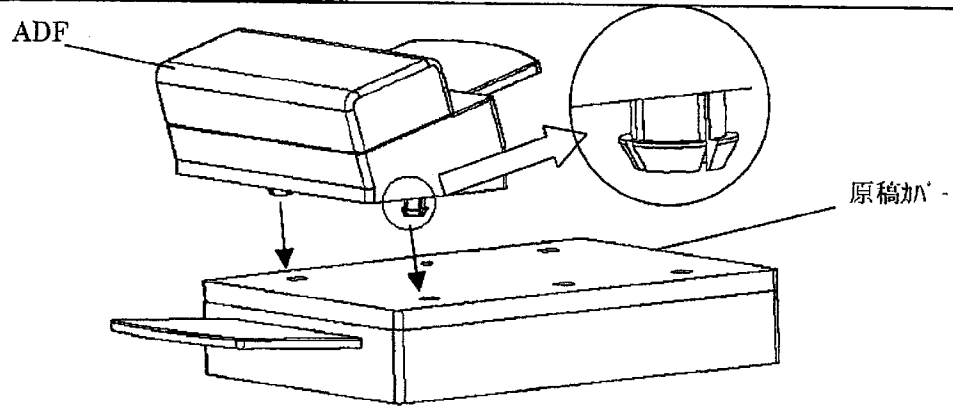
当然、フラットベッドモデルに ADF を搭載すれば、ADF+FB モデルになる。



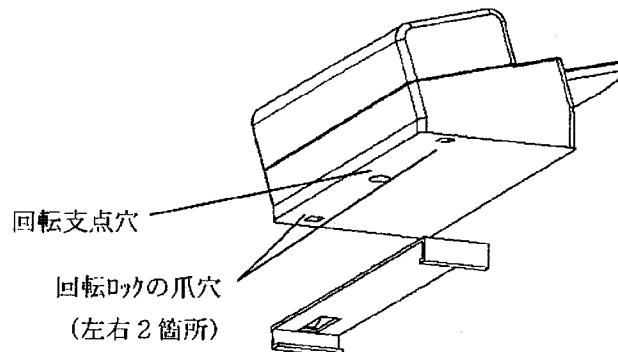
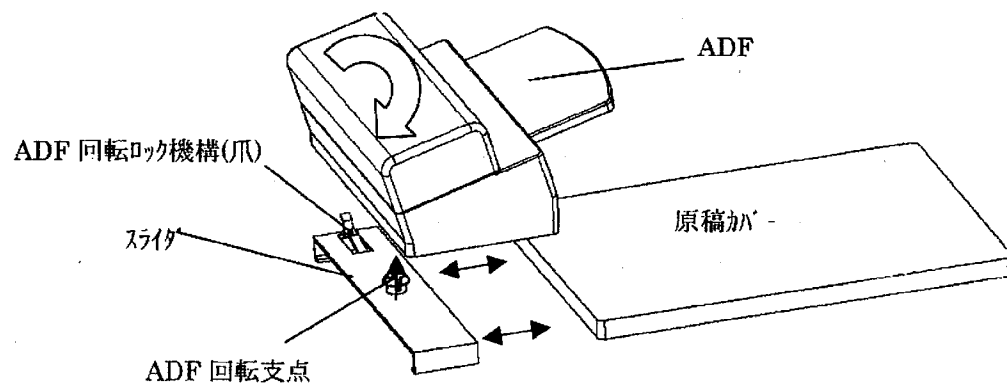
<<本発明の図 その4 (目的達成技術)>>

下図の機構で原稿カバーとADFの接合を行う。

ADFユニット底面から突起（爪形状）を形成し、原稿カバーに配備した穴に差し込む機構。
（向きも変えられる）

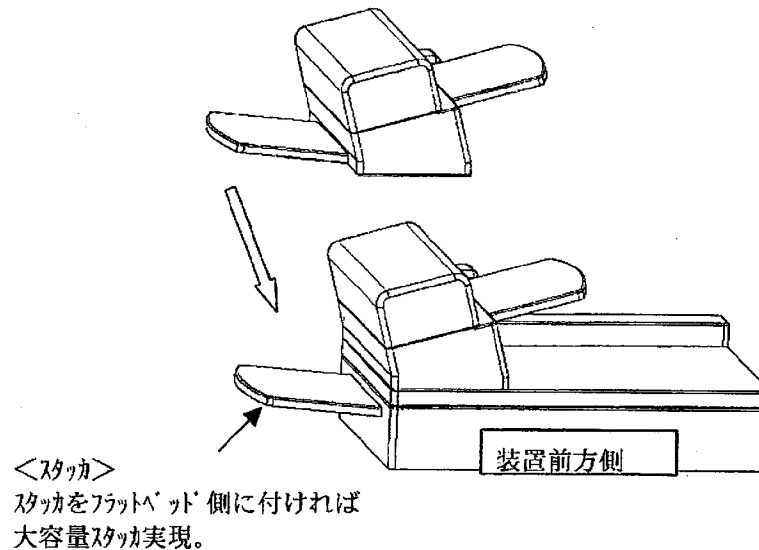


回転支点／爪を配備したスライダを 原稿カバーにレール機構で差込むことで左右に移動可能。
また、スライダには回転支点があり、ADF の向きを変えることが可能。
ADF 向きの保持は、スライダに実装されたロック機構（爪）で行う。



原稿カバーとADFの接合機構図

<<本発明の図 その5 (追加効果)>>
大容量スタッカにも対応可能。



3 【特許請求の範囲】

フラットベッド読取部と、ADF (Auto Document Feeder) を有するイメージスキャ装置で、以下の項目を請求の範囲とする。

1. イメージスキャ装置の原稿カバー上で ADFユニットの向き、位置を自由自在に可変させる構造案。
 2. ADFモデル、フラットベッドモデルといった様々なバリエーションモデルを製造側が簡単に設定できる構造。
 3. ADF に実装されているスタッカをフラットベッド側に付け替えることで、大容量スタッカにも対応可能な構造。
- (本発明の図 その5)

1. 目的

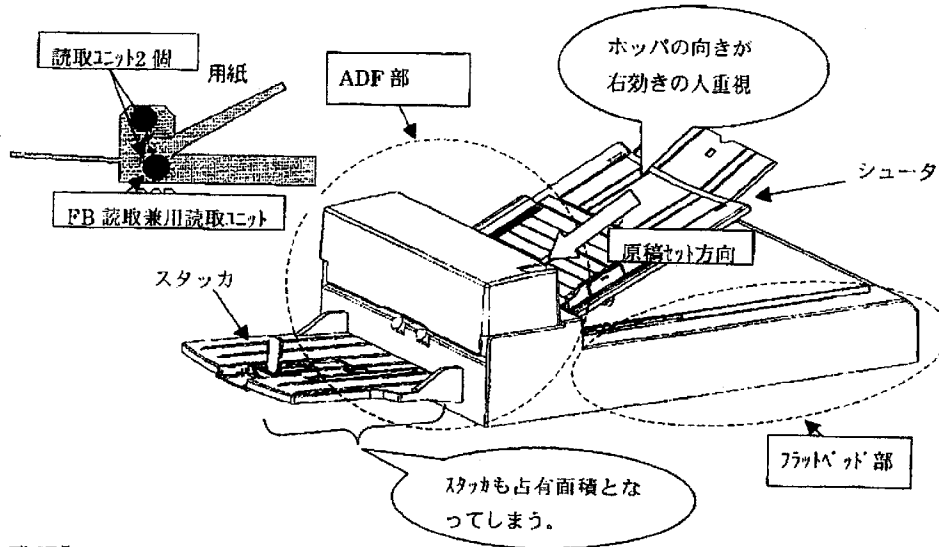
本発明は、フラットベッド読取部と、ADF (Auto Document Feeder) を有するイメージスキャナ装置に関し、

- ①. フラットベッド、ADFの同時読取りを可能にする。
 - ②. 装置の占有面積を小さくする。
 - ③. 使用する設置環境に合わせ、装置の操作性を変化させる。
- 上記3点の達成を目的とする。

2. 構成

【当社の従来技術】

2つの読取りユニットを配備し、ADF使用時の両面読取り及びフラットベッド使用時も兼用構造。ADFは、装置左側に配備されているため、シュータへの原稿セットは、右利きの人には操作しやすいが、左利きの人には難しさがあった。



【本発明】

装置に、ADF部の読取りユニット2個 フラットベッド部の読取りユニット1個 計3個の読取りユニット及び2つのインターフェースを実装し、ADF、FBの同時読取りが行える構造とし、ADFユニットが装置原稿カバー上の任意の位置に配備でき、かつADFの向きを回転可能とする構造。

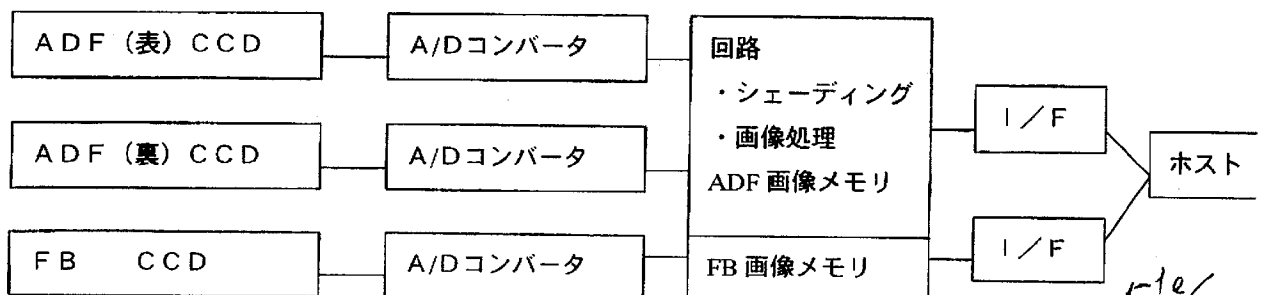
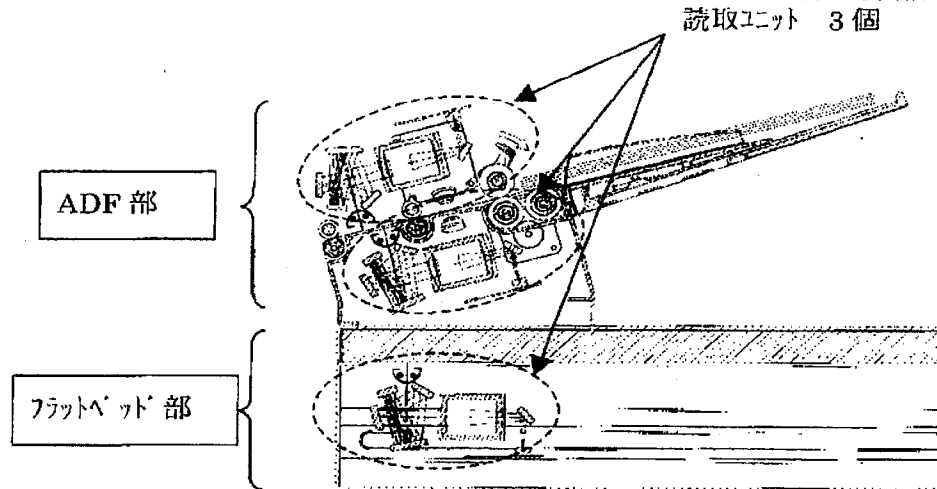


EXHIBIT 2

PATENT, UTILITY MODEL APPLICATION REQUEST PAPER

Reception No. 03P00040

ASSIGNMENT Assignee: PFU Limited "ASSIGNEE" has acknowledged of the receipt of the assignment that the following ASSIGNORS hereby, sell, assign and transfer to ASSIGNEE the entire and exclusive right title and interest to the invention both at home and abroad. Assignor: c/o PFU Limited					IP Dept.	Dept. Chief	Sec. Chief
Name of the Inventors	L.S.	Employee Code	Ladder Code	Department (Ext.)	Reference Number		
筆頭 (加川 雅三) Masayoshi Kawai	印	386201	765702	2nd Operation Dept., 1st Engineering Div. (7573 - 2243)	Date of the Invention:		
2 (加賀 典光) Norio Kanemitsu	印	799500	765700	2nd Operation Dept. (7171 - 4630)	Project Number:		
3 (阿部 泰久) Tamio Amagai	印	772437		2nd Operation Dept., 1st Engineering Div. (7171 - 4640)	Project Name:		
4 ()	印				Implementation Status:		
Title of the Invention:					契約関係	① Nothing 2. Joint Development 3. Entrusted Development 4. Other	
名称 Image Scanner Apparatus Prior Art Search Originally Conducted (Search History is attached)					実施状況 ① Nothing 2. Joint Development 3. Entrusted Development 4. Other	Belongs to: ① Solo 2. Joint 3. Outside Applicant: ① PFU 2. FUJITSU 3. Other	
公知例調査 <input type="checkbox"/> Conducted with IP Group <input type="checkbox"/> 独自に実施(検索履歴を添付)、 <input type="checkbox"/> Not Conducted					出願期限 Application Due Date		

1. OBJECTS

The present invention relates to an image scanner having a Flatbed-type scanning part and an ADF (Auto Document Feeder).

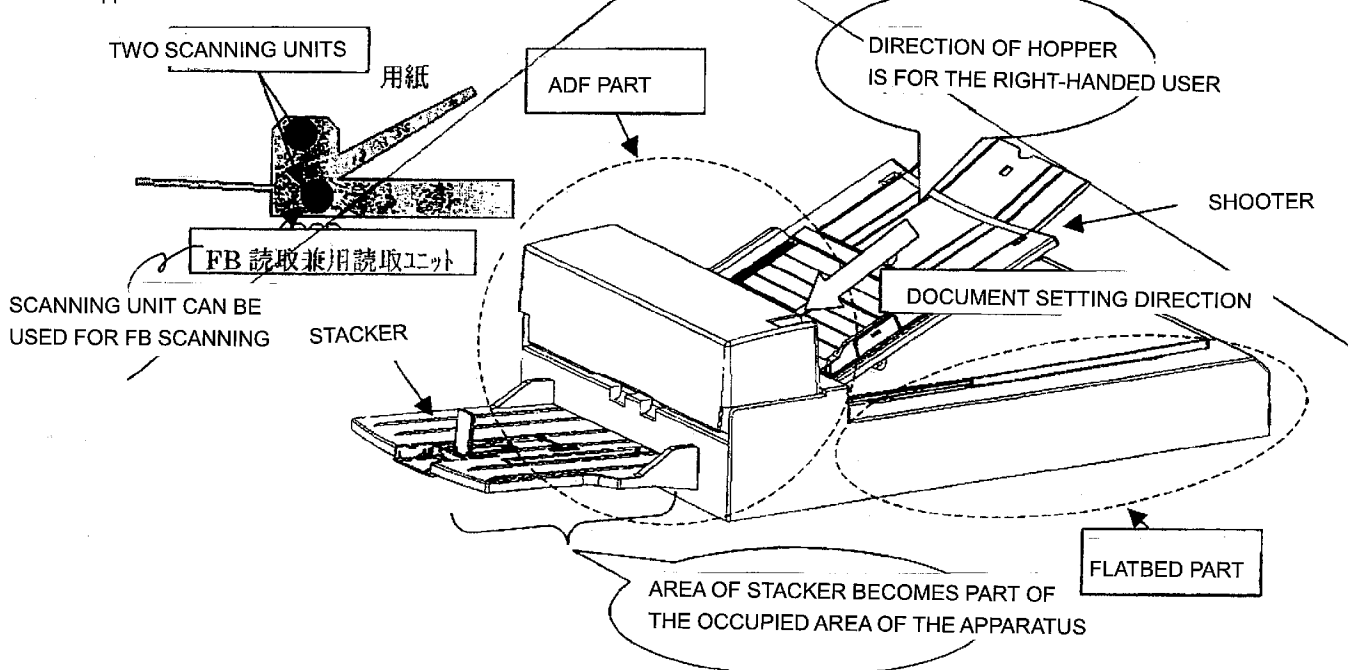
- ① Operability of the apparatus can be changed in accordance with the installation environment for using the apparatus.
 - ② An area occupied by the apparatus can be reduced.
 - ③ A wide variety of models, such as the ADF-model, the flatbed-model, etc., can be developed easily by a manufacturing department.
- The objects of the present inventions are to achieve the above three points.

2. CONFIGURATION

[Prior Art in Our Company]

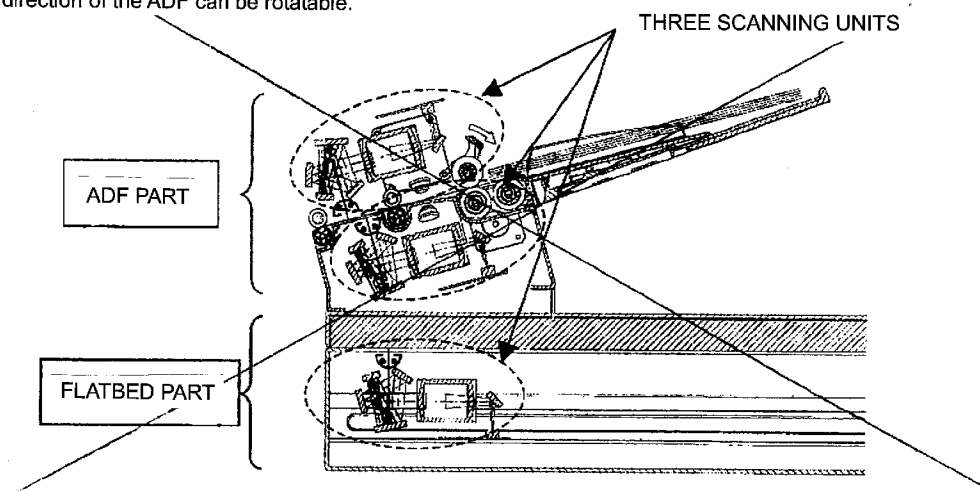
Two scanning units are provided for the apparatus, and the two scanning units are used in both a both-side scanning in the operation of the ADF and a scanning in the operation of the Flatbed scanning part.

Since the ADF is provided at the left side of the apparatus, it is easy for a right-handed user to set documents on a shooter of the ADF, but it is not easy for a left-handed user to set documents on the shooter. Further, the area of a stacker becomes part of the area occupied by the apparatus.

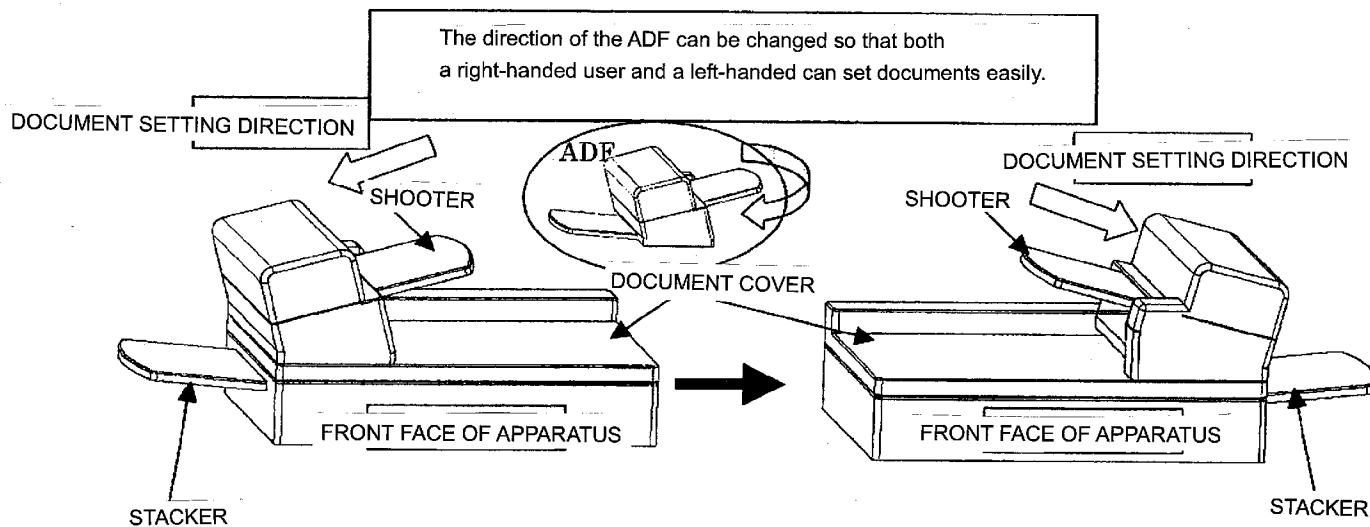


[Present Invention]

Mechanism: Three scanning units (two scanning units in an ADF part and one scanning unit in a Flatbed scanning part) are mounted, so documents can be read only by using the ADF, the ADF can be mounted at an arbitrary position on the surface of a document cover of the apparatus, and the direction of the ADF can be rotatable.



<<Figure 1 of the present invention (Regarding the object ①)>>



<<Figure 2 of the present invention (Regarding the object ②)>>

If the ADF is moved to the center position of the document cover, the area occupied by the apparatus including the shooter and the stacker can be minimized.

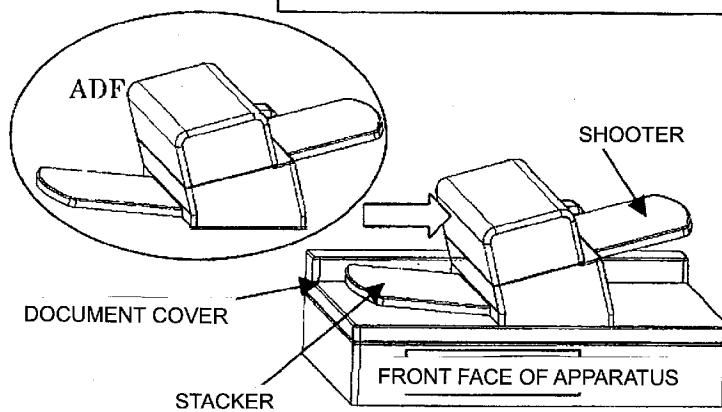
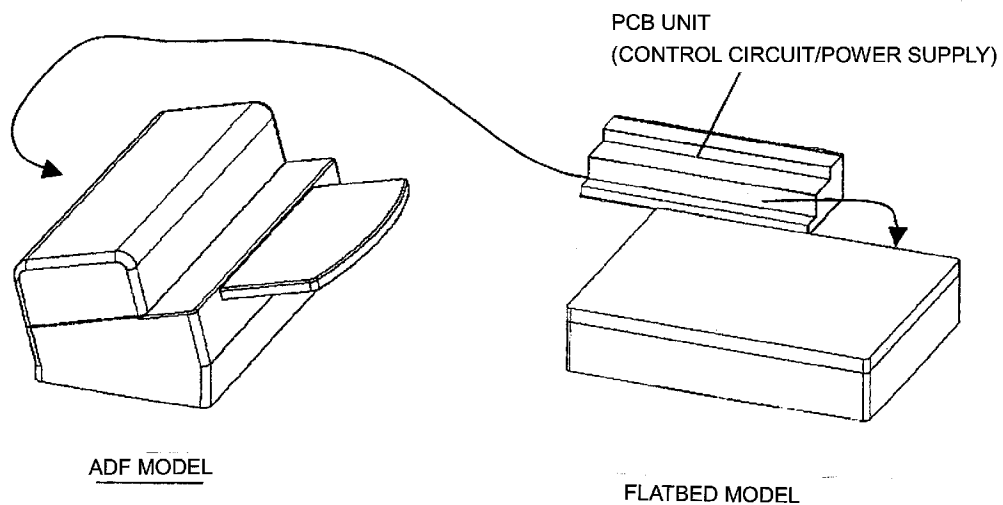


IMAGE FOR SHOWING THE APPARATUS WITH ITS DOCUMENTS COVER OPEN

<<Figure 3 of the present invention (Regarding the object ③)>>

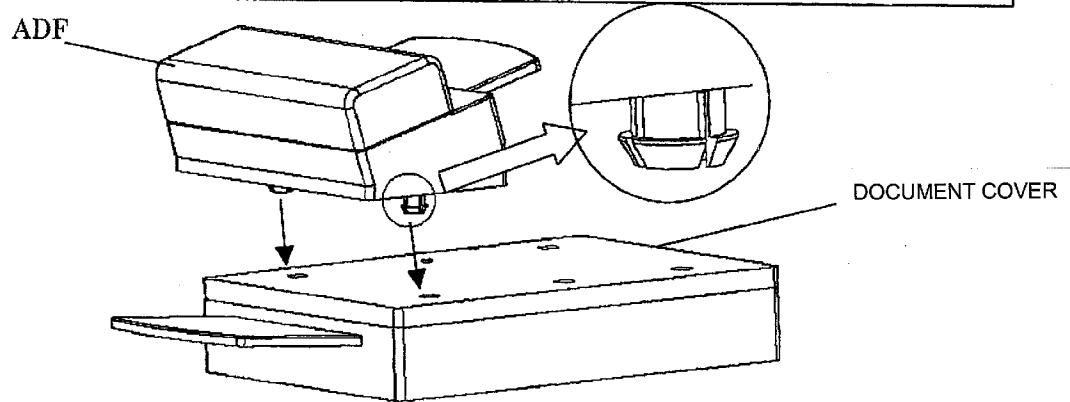
In accordance with the configuration of the present invention, three kinds of scanners including an ADF model, a Flatbed model and an ADF&Flatbed model can be prepared easily without any new research and development by the manufacturing department because the ADF part and the Flatbed part can read documents independently (and three scanning units and the ADF can be detachable from the apparatus freely.). The following figures indicate the ADF model and the Flatbed model. Further, the figures suggest that two models can be prepared easily in accordance with the mounted position of a PCB unit (on the ADF model or on the Flatbed model). It is natural that the ADF&Flatbed model is prepared by mounting the ADF model on the Flatbed model.



<<Figure 4 of the present invention (Technology for achieving the object)>>

The document cover and the ADF are coupled by using a mechanism indicated in the following figures.

Mechanism: Coupling protrusions (nail-like shape) are provided on the bottom surface of the ADF unit and the coupling protrusions are inserted into holes provided on the document cover.
(The direction of the ADF can be changed by using this mechanism.)



Mechanism: A rotatable pivot point and a nail are provided on a slider, and the slider is inserted into a rail mechanism of the document cover so that the slider is moveable to the left and right along the rail mechanism. The direction of the ADF can be changed by using the rotatable pivot point provided on the slider. The ADF is fixed by a rock mechanism (nail) provided on the slider so that the direction of the ADF is determined.

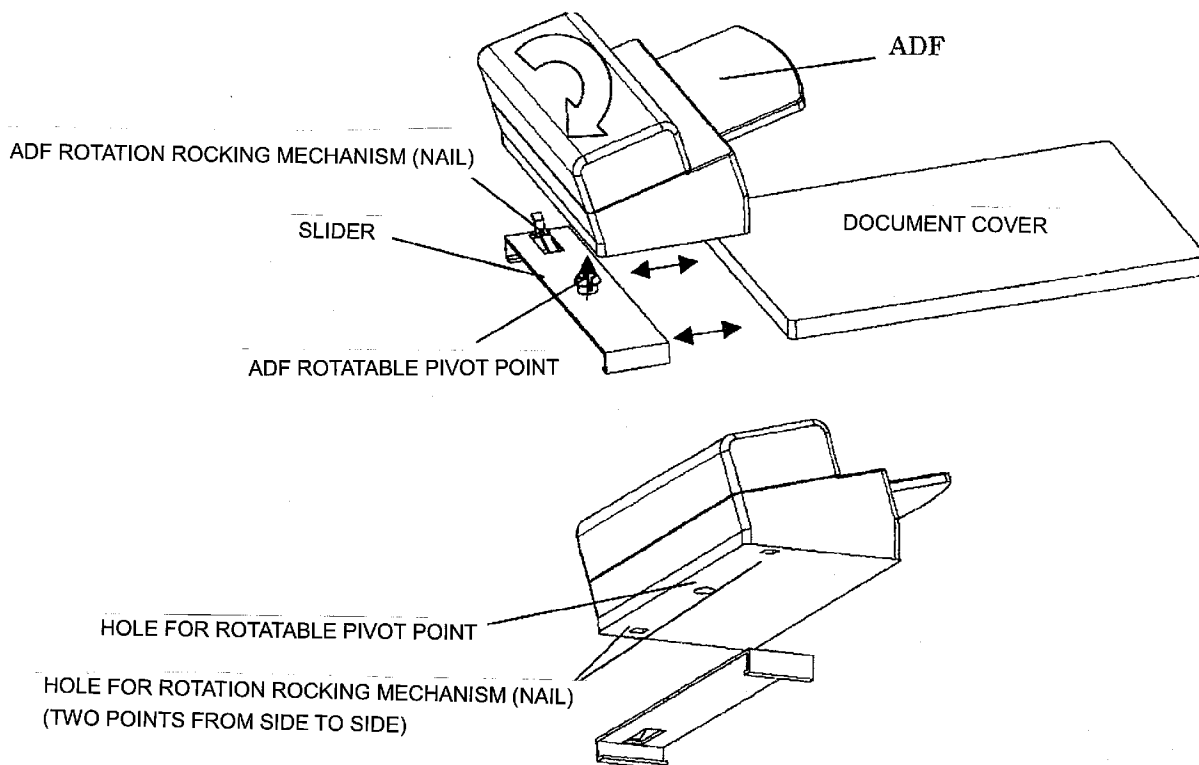
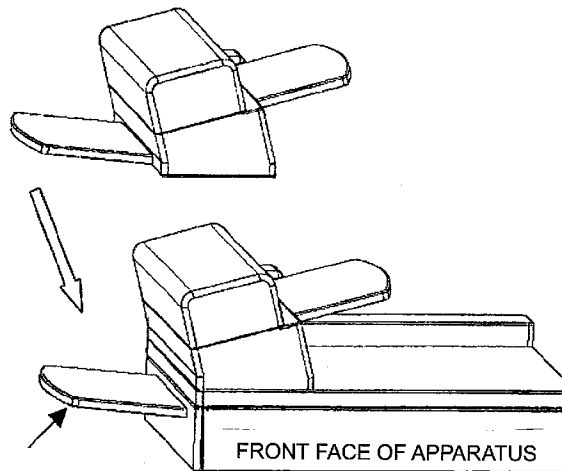


Figure for coupling mechanism between document cover and ADF

<<Figure 5 of the present invention (Additional effects)>>

The present invention is applicable to a large capacity stacker.



<STACKER>

If the stacker is mounted on the Flatbed-type scanning part, the stacker can be used as a large capacity stacker.

3. CLAIM

An image scanner comprising a Flatbed scanning part and an ADF (Auto Document Feeder), and further including the following mechanisms:

1. The direction of the ADF can be changed freely on the surface of a document cover of the image scanner.
2. A wide variety of models, such as an ADF-model, a Flatbed-model, etc., can be developed easily by a manufacturing department.
3. The stacker can be used as a large capacity stacker if the stacker is replaced from the ADF to the Flatbed-type scanning part (please see figure 5 of the present invention).

1. OBJECTS

The present invention relates to an image scanner having a Flatbed-type scanning part and an ADF (auto-document feeder).

- ① Reading with the Flatbed-type scanning part and reading with the ADF can be performed simultaneously.
- ② An occupied area of the apparatus can be reduced.
- ③ Operability of the apparatus can be changed in accordance with the installation environment for using the apparatus.

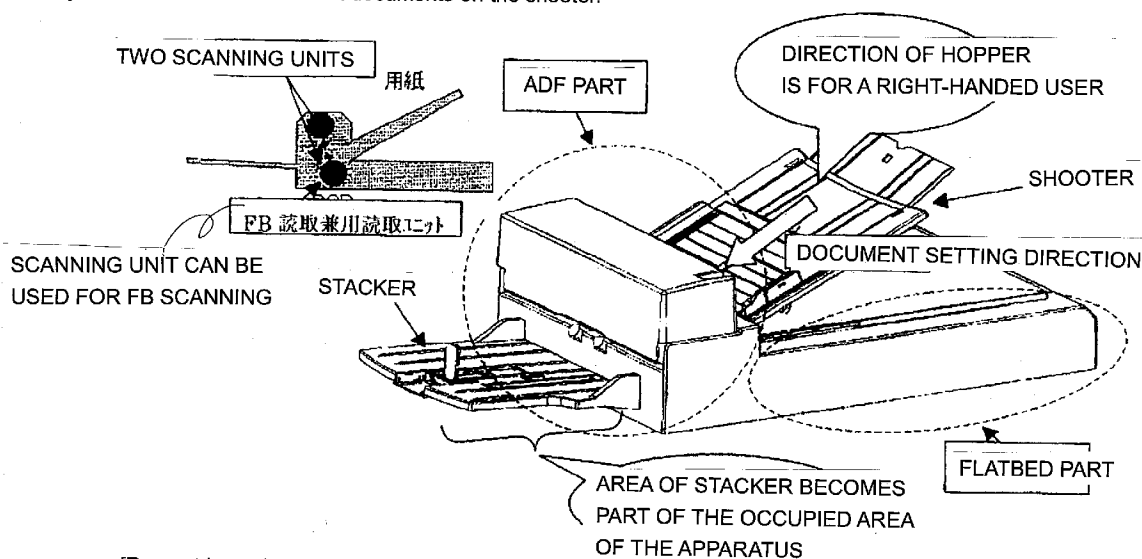
The objects of the present inventions are to achieve the above three points.

2. CONFIGURATION

[Prior Art in Our Company]

Two scanning units are provided for the apparatus, and the two scanning units are used in both a both-side scanning in the operation of the ADF and a scanning in the operation of the Flatbed scanning part.

Since the ADF is provided at the left side of the apparatus, it is easy for a right-handed user to set documents on a shooter, but it is not easy for a left-handed user to set documents on the shooter.



[Present Invention]

Mechanism: Three scanning units (two scanning units in an ADF part and one scanning unit in a Flatbed scanning part) and two interfaces are mounted, so reading with the Flatbed-type scanning part and reading with the ADF can be performed simultaneously, the ADF can be mounted at an arbitrary position on the surface of a document cover of the apparatus, and the direction of the ADF can be rotatable.

